**WHAT IS CLAIMED IS:**

1. A method for driving an LCD panel consisting of scan lines and column lines arranged in rows and columns respectively, comprising the steps of:

storing data to be displayed on the LCD panel in a display data memory;

partitioning the scan lines into a plurality of scan blocks, each scan block containing m number of scan lines;

sequentially selecting each scan block, activating multiple scan lines within the scan block;

concurrently outputting from the display data memory m number of display data items to be displayed in adjacent rows along the same column on the LCD panel; and

generating a column signal that would produce a display on the LCD panel according to the display data when multiple rows are selected.

2. The method of claim 1, wherein the step of selecting each scan block further comprises the step of applying orthogonal function data to said multiple scan lines.

3. The method of claim 2, wherein said step of generating a column data signal comprises the step of:

performing exclusive OR operation between said display data items and orthogonal row function data to calculate mismatch numbers.

4. The method of claim 3, wherein said step of generating a column signal comprises the step of:

decoding said mismatches to calculate mismatch numbers.

5. The method of claim 4, wherein said step of generating a column signal comprises the step of:

shifting the data levels of the mismatch numbers to different data levels.

6. The method of claim 5, wherein said step of generating a column signal further comprises the step of:

selecting a voltage level from k number of voltage levels.

7. The method of claim 1, wherein m is 3.

8. The method of claim 7, wherein k is 2.

9. The method of claim 1, wherein said display data items are arranged along the same column inside the display data memory.

10. The method of claim 1, wherein said display data items are arranged along the same row inside the display data memory.

11. The method of claim 1, wherein the LCD panel is an STN LCD panel.

12. The method of claim 1, wherein said display data memory stores data for displaying monochrome in gray scale.

13. The method of claim 1, wherein said display data memory stores RGB data for displaying colors.

14. A driver for driving an LCD panel consisting of scan lines and column lines arranged in rows and columns respectively, comprising:

a display data memory having rows and columns of cells for storing display data partitioned into blocks of m number of scan lines and for concurrently outputting m number of data items be displayed in a selected block of scan lines and a selected column line; and

a column signal circuit for calculating column signals that generates the same display by selecting multiple rows.

15. The driver of claim 14, wherein the display data memory is a RAM.

16. The driver of claim 14, wherein m is 3.

17. The driver of claim 14, wherein said m number of data items to be displayed are arranged inside the display data memory along the same column.

18. The driver of claim 14, wherein said m number of data items to be displayed are arranged inside the display data memory along the same row.

19. The driver of claim 14, wherein said display data memory stores data for displaying black and white in gray scale.

20. The driver of claim 14, wherein said display data memory stores RGB data for displaying colors.

21. The driver of claim 14, wherein said LCD panel is an STN LCD panel.

22. The driver of claim 14, wherein said column signal circuit comprises:

an XOR block having multiple XOR sets of a predetermined number of XOR gates, each XOR set for performing exclusive OR operation between the m number of data items and orthogonal function data to determine mismatches.

23. The driver of claim 22, wherein said column signal circuit further comprises:

a decoder block having multiple decoders, each decoder for determining a mismatch number based the result of mismatches from said each XOR set.

24. The driver of claim 23, wherein said column signal circuit further comprises:

a level-shifter block having multiple level shifters, each level shifter for outputting a data level translated from said each decoder.

25. The driver of claim 24, wherein said column signal circuit further comprises:

a voltage selector block having multiple voltage selectors, each voltage selector for selecting a voltage for the output of said each level-shifter.

26. The driver of claim 25, wherein m is 3.

27. The driver of claim 26, wherein said each level shifter is a 1-bit level shifter.

28. The driver of claim 27, wherein said voltage selector block selects one voltage level from 2 voltage levels.

29. A liquid crystal display, comprising:

a LCD panel consisting of scan lines and column lines arranged in rows and columns respectively,

a row driver for selecting scan lines; and

a column driver for driving column lines comprising:

a display data memory having rows and columns of cells for storing display data partitioned into blocks of m number of scan lines and for concurrently outputting m number of data items be displayed in a selected block of scan lines and a selected column line; and

a column signal circuit for calculating column signals that generates the same display by selecting multiple rows.

30. The liquid crystal display of claim 29, wherein the LCD panel is an STN LCD panel.

31. The liquid crystal display of claim 29, wherein m is 3.

32. The liquid crystal display of claim 29, wherein the column signal circuit

comprises:

an XOR block having multiple XOR sets of a predetermined number of XOR gates, each XOR set for performing exclusive OR operation between the m number of data items and orthogonal function data to determine mismatches;

a decoder block having multiple decoders, each decoder for determining a mismatch number based the result of mismatches from said each XOR set;

a level-shifter block having multiple level shifters, each level shifter for outputting a data level translated from said each decoder; and

a voltage selector block having multiple voltage selectors, each voltage selector for selecting a voltage for the output of said each level-shifter.